



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Robert Mazzei et al. )  
Serial No. Not yet known )  
Filed: Concurrently Herewith )  
Atty. Dkt. No.: 2000-013B )  
Title: "Practice Projectile With Smoke )  
Signature" )

Assistant Commissioner of Patents  
and Trademarks  
Washington, D. C. 20231

**PRELIMINARY AMENDMENT**

Sir:

Preliminary to examination, kindly amend this application as follows:

**IN THE SPECIFICATION**

On page 1, before the first line of the text, please add the following sentence:

- - - This application is a continuation of application serial number 10/087,711 filed on  
February 26, 2002. - - -

Please replace the paragraph at page 5, lines 6 - 14, with the following paragraph:

-- FIG. 1 is a cross-sectional view of the 60 mm, M769 Full Range mortar cartridge,  
or projectile 100, which is designed to be ballistically matched or similar to the tactical  
60 mm, M720 HE mortar cartridge. With further reference to FIG. 2, the projectile 100 is  
generally comprised of the following components: a projectile body 1; a fuse 2; an  
obturator ring 3 (FIG. 2); a center vent tube 4; a plurality of vent holes 5 (more clearly  
illustrated in FIG. 3); a plurality of vent plugs 6; propellant charges 7; and a

boom/fin/ignition cartridge assembly 8, which is also referred to herein as boom assembly 8.--

Please replace the paragraph at page 6, lines 4 - 8, with the following paragraph:

-- The propellant charges 7 can also be the same components as the tactical round M720 HE. The boom/fin/ignition cartridge assembly 8 is designed to provide dynamic stability during airborne operation. In addition, the boom assembly is there for holding ignition cartridge and propellant charges.--

Please add the following paragraph at page 6, line 26:

-- The fuze 2 has an elongated stepped shape comprised of a forward end 101, an intermediate step 102, and a narrower rearward step 103. The rearward step 103 defines an edge 112 with the intermediate step 102. The center vent tube 4 has a forward edge 110, such that when the projectile 100 is assembled, the rearward step 103 fits inside the center vent tube 4, with the forward edge 110 abutting edge 112 to secure the center vent tube 4 to the fuze 2.--

On page 12 of the specification, please delete current lines 5-20 there, and then insert the following new text:

- - - A new projectile design for the M224 Mortar gun system that is ballistically similar to the M720 high explosive mortar cartridge. The present design compensates for the realistic hands-on practice cartridges, and allows for the release of flame or smoke and bang upon impact to simulate a successful deployment of the tactical cartridge. The projectile design not only balances the weight deficiency due to the removal of the explosive fills, but also improves conventional method of releasing a smoke signature as in other full and short range practice cartridges. The projectile includes three main components: a center vent tube, a plurality of vent holes, and a plurality of vent plugs.- -

## **IN THE DRAWINGS**